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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/088,541	03/19/2002	Gary S Simpson	124-928	6928	
7590 08/25/2005			EXAMINER		
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1100 North Glebe Road			ART UNIT	PAPER NUMBER	
Arlington, VA 22201-4714			2132		
	•		DATE MAILED: 08/25/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

<u> </u>					
	Application No.	Applicant(s)			
Office Action Comments	10/088,541	SIMPSON ET AL.			
Office Action Summary	Examiner	Art Unit			
T. M. W. D. D. T. T. W. W. D. T. T. W.	Brandon S. Bludau	2132			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status					
<ol> <li>Responsive to communication(s) filed on</li> <li>This action is FINAL. 2b)⊠ This action is non-final.</li> <li>Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.</li> </ol>					
Disposition of Claims					
4)  Claim(s) 1-37 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-37 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) ☐ The specification is objected to by the Examiner.  10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:				

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#### **DETAILED ACTION**

# Specification

This application does not contain an abstract of the disclosure as required by 37
 CFR 1.72(b). An abstract on a separate sheet is required.

This application does not contain the necessary contents in the specification. A discussion of these contents is below.

### Content of Specification

- (f) <u>Background of the Invention</u>: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
  - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
  - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.

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# Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 19- 31 are rejected under 35 U.S.C. 101 because the claimed invention of a computer program is directed to non-statutory subject matter.

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 discloses "a plurality of database computer systems" wherein the claim it is dependent upon discloses the use of a database computer system. This particular wording causes the claim to be unclear, as to its limitation.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1- 3,5,11-13,17,20-21,23,31-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Baker (US Patent 5,696,898).

5. As per claim 1, Baker discloses a method for computer security to control access to data held on a computer system (columns 2,3 lines 66-3) as requestable datasets (see Fig 2. the data comprises URLs and the URLs are grouped in sets) characterized in that it includes:

Allocating computer system users between a plurality of user groups, each user group corresponding to a respective data access category selected from a plurality of such categories (column 5 lines 37-43);

Associating each dataset with a dataset access category (see fig.2 wherein the IDs in block 215 are access categories, see column 4 lines 47-49); and

Giving access to each dataset only to user group members associated with an appropriate data access category for that dataset (column 3 lines 8-14).

- 6. As per claim 2, Baker discloses that the user groups and data access categories have hierarchical levels in which a higher data access category incorporates a or, as the case may be, each lower data access category, and the method includes allowing access to datasets by members of user groups associated with the data access category levels equal to and higher that those to which such datasets correspond (column 5 lines 6-12).
- 7. As per claim 3, Baker discloses a method characterized in that each user is associated with a computer based identifying means and the method includes the step of determining a user's identity from the identifying means (column 3 lines 54-56 and column 4 lines 36-39).

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- 8. As per claim 5, Baker discloses that the datasets are web pages and the method includes the step of gaining access to the computer network via the Internet or the World-Wide-Web (column 2 line 3 column 3 line 8).
- 9. As per claim 11, Baker discloses the data maintained on a database computer system (World Wide Web), and dataset access is given by access control software operated on a separate access control computer system (see Fig.1 block 112) and a user gains access to data by means of access request software running on a user computer system separate from the database and access control computer systems (see Fig. 1 blocks 107-109).

Baker does not explicitly state that the access control or the access request methods are on software, but one skilled in the art would clearly see that without explicitly saying software, the method that Baker discloses and implements must be run on and therefore inherently includes software at the user, access control, and database systems.

- 10. As per claim 12, Baker disclosés a firewall at the access control system (see Fig. 1 block 113).
- 11. As per claim 13, Baker discloses the data is maintained on a plurality of database computer systems and in response to a data request the access control software determines whether or not corresponding data access is appropriate after relaying the request to a dataset computer system having such data (column 4 lines 7-15).
- 12. As per claim 17, Baker characterizes the step of giving access to a dataset includes unencrypted transfer of data from datasets to which access is granted (column

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5 line 45; it is known to one of ordinary skill in the art that the http protocol includes unencrypted pages).

- 13. Claim 19 is rejected for disclosing the same subject matter as claim 1. One of ordinary skill in the art can clearly see that the method disclosed would inherently include a computer program so that it could be implemented.
- 14. Claim 20 is rejected for disclosing the same subject matter as claim 2.
- 15. Claim 21 is rejected for disclosing the same subject matter as claim 3.
- 16. Claim 23 is rejected for disclosing the same subject matter as claim 5.
- 17. Claim 31 is rejected for disclosing the same subject matter as claim 17.
- 18. Claim 32 is rejected for disclosing the same subject matter as claim 1, wherein the network access controller is found in Baker (Fig 1 number 112).

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 19. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baker as applied to claim 3 above, and further in view of Davis et al. "An Implementation of MLS on a Network of Workstations Using X.500/509".

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Baker does not disclose the use of X.509 certificates as the computer based identifying means.

Davis discloses the X.509 certificate on page 553 under heading B. titled: *Access Server Model*.

Davis is analogous art because it discusses a computer security system similar to Baker.

It would have been obvious at the time of the invention for one of ordinary skill in the art to modify Baker to include the use of X.509 certificates to identify the system users.

Motivation for one of ordinary skill in the art at the time of the invention to modify Baker as discussed above would have been to "provide a framework of authentication services by the directory to its users" (Davis, page 548 under heading B).

Therefore, it would have been obvious to modify Baker to include X.509 certificates in order to provide authentication services to its users.

20. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baker as applied to claim 3 above, and further in view of Edd et al. (US PgPub 2002/0184255).

Baker discloses that the datasets are web pages, but does not disclose that the step of associating each dataset with a dataset access category comprises inserting meta tags in html web page code.

Edd discloses the use of meta tags in html web page code to associate dataset access categories (column 9 section 1035) wherein the "security information" could be considered the access categories.

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Edd is analogous art because it describes security techniques for databases of information, particularly web pages or Internet content.

It would have been obvious at the time of the invention for one of ordinary skill in the art to modify Baker to include the use of meta tags to associate the datasets with a dataset access category.

Motivation for one of ordinary skill in the art at the time of the invention to modify Baker as discussed above would have been to standardize the association of security information with the data (column 9 section 1035).

- 21. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker as applied to claim 1 above, in view of Davis and further in view of Harn "ID-based Cryptographic Schemes for User Identification, Digital Signature, and Key Distribution."
- 22. As per claim 7, Baker discloses the method of claim 1 while Davis further discloses the use of X.509 certificates that describe authentication procedures using public and private key encryption methods for signing data and identifying users.

Baker and Davis do not disclose a challenge response exchange regarding user identification before the step of giving access to a dataset.

Harn discloses a scheme, wherein "user identification can be achieved directly through a challenge-response type procedure." The steps of the scheme include using a private key to sign test data (wherein the data is a randomly selected odd number) provided by the access control computer system and forwarding the signed data and identifying means to the access control computer system; and using the access control

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computer system to verify the identifying means, verify the user by using the public key to verify the signed data, and determine user group and associated data access category from the identifying means (page 758). It would be obvious for one of ordinary skill in the art to see that the user group and data access category information, while not explicitly stated, could be included in the identification data.

Harn is analogous art to Davis, as it pertains to authentication and identification schemes using public and private keys.

It would have been obvious at the time of the invention to modify Baker with Davis as shown above in claim 4 and further to modify Davis to include a challenge-response exchange wherein the access control computer system assigns test data.

Motivation for one of ordinary skill in the art at the time of the invention to modify Baker-Davis as discussed above would be to "provide user identification and digital signature" as taught in Harn (page 757).

- 23. Claim 8 is rejected as discussed above.
- 24. As per claim 9 discussed above, Harn discloses the test data is random data.
- 25. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baker as applied to claim 1 above, in view of Davis, and further in view of McNabb (US Patent 6,289,462).

Baker discloses the method of claim 1 while Davis discloses providing database access to a first kind of user having a user certificate for identification purposes.

Neither Baker nor Davis discloses granting database access to a second kind of user lacking a user certificate.

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McNabb discloses allowing database access to unauthorized users as anonymous access (column 18 lines 5-7 lines and column 22 lines 44-46). While McNabb doesn't explicitly describe an authentication method using certificates, one of ordinary skill in the art could easily see that the authorization method in McNabb could be performed with user certificates.

McNabb is analogous art because it relates to a security method that grants access privileges based on security-level attributes.

Motivation for one of ordinary skill in the art to modify Baker/Davis to include access for users without certificates would be to allow access of public or non-sensitive data held on the database.

- 26. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker as applied to claim 1, and further in view of Hayman (US Patent 5,859,966).
- 27. As per claim 14, Baker discloses the method of claim 1, but does not disclose that the data access categories and the user groups and datasets with which they are associated are assigned numerical values.

Hayman does disclose that numerical values are assigned to the data access categories and the user groups and datasets with which they are assigned (column 8 line 16-18) and inherently explains the step of giving dataset access involves comparing user group and dataset numerical values to determine whether or not access is to be granted or denied. It is not an object of Hayman's invention to assign numerical numbers, but Hayman references mandatory access protocol (MAC) as described in the specification of the applicant wherein the MAC labels are stored as numeric values.

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- 28. As per claim 15, Hayman discloses that the data access categories have different sections each with a section numerical value and the step of comparing numerical values comprises comparing section numerical values of corresponding sections of user group and dataset numerical values (column 8 line 16-18 wherein the sections are referred to as categorical components).
- 29. As per claim 16, Hayman discloses that access to a dataset is provided only if all section comparisons are satisfied (column 8 39-45).
- 30. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baker/Hayman as applied to claim 16 and further in view of Netscape (Netscape Messaging Server Version 3.0 Administrator's Guide, Netscape Communications Corporation, 1995 pages 57-58).

Baker and Hayman disclose the method according to claim 16 as discussed above.

Baker and Hayman do not disclose the step of running checking/blocking software on the user computer system to screen incoming data for encryption to block unwanted data content.

The Administrator's Guide discloses an SSL package that allows the user to configure a specific port to block encrypted data.

The Administrator's Guide is analogous art because it relates to how data is handled over a network.

Motivation for one of ordinary skill in the art at the time of the invention to modify Baker-Hayman to include blocking software would be to allow the user the ability to

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specify the level of encryption for receiving and managing data as taught in Netscape page 57.

- 31. Claim 22 is rejected for disclosing the same subject matter as claim 4.
- 32. Claim 24 is rejected for disclosing the same subject matter as claim 6.
- 33. Claim 25 is rejected for disclosing the same subject matter as claim 7.
- 34. Claim 26 is rejected for disclosing the same subject matter as claim 8.
- 35. Claim 27 is rejected for disclosing the same subject matter as claim 9.
- 36. Claim 28 is rejected for disclosing the same subject matter as claim 10.
- 37. Claim 29 is rejected for disclosing the same subject matter as claim 12.
- 38. Claim 30 is rejected for disclosing the same subject matter as claim 14.
- 39. Claim 33 is rejected for disclosing the same subject matter as claim 14.
- 40. Claim 34 is rejected for disclosing the same subject matter as claim 10.
- 41. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baker as applied to claim 19 and 32 above, and Davis as applied to claim 4. Wherein the computer network for database access is that which is shown in Baker, Fig.1.
- 42. Claim 36 is rejected for disclosing the same subject matter as claim 6.
- 43. Claim 37 is rejected for disclosing the same subject matter as claim 5.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon S. Bludau whose telephone number is 571-272-3722. The examiner can normally be reached on Monday -Friday 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brandon S Bludau Examiner Art Unit 2132

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